

TECHNICAL DATA SHEET

TRICOLENE
LLB1919

Linear Low Density Polyethylene

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ADDING A WORLD OF VALUE

PRODUCT DESCRIPTION

This type of LLDPE is a copolymer of ethylene and 1-butene produced with Ziegler-Natta catalysts in a gas phase polymerization process.

PROCESSING METHODS

Blown Film (Co)Extrusion

CHARACTERISTICS

Good Mechanical Properties
Good Mixing with LDPE

APPLICATIONS

Trash Bags
Agricultural Films
Liners for Drums

RESIN PROPERTIES

TEST METHOD

VALUES, ENGLISH UNITS

VALUES, INTERNATIONAL UNITS

Melt Flow Rate 2.16 kgf/190 °C MFR₂

ASTM D1238

1.1 g/10 min

1.1 g/10 min

Density 23 °C

ASTM D1505

0.919 g/cm³0.919 g/cm³

Processing Aid

None

None

Antioxidant Package

Yes

Yes

BLOWN FILM PROPERTIES

TEST METHOD

VALUES, ENGLISH UNITS

VALUES, INTERNATIONAL UNITS

Evaluated Film Thickness

1.0 mils

25.4 µm

Dart Impact Strenght

ASTM D1709A

120 g

120 g

38.0 mm (1.5 in), 0.66 m (26.0 in), F50

Elmendorf Tear Strenght

ASTM D1922

MD

130 g

130 g

TD

490 g

490 g

Tensile Strenght at Break

ASTM D882

MD

5,500 psi

38 MPa

20.0 in/min (508 mm/min)

TD

3,500 psi

24 MPa

Tensile Elongation at Break

ASTM D882

MD

800 %

800 %

20.0 in/min (508 mm/min)

TD

950 %

950 %

Tensil Secant Modulus of Elasticity

ASTM D882

MD

27,000 psi

186 MPa

1 % Elongation, 0.051 in/min (1.3 mm/min)

TD

33,000 psi

228 MPa

Haze

ASTM D1003

9.0 %

9.0 %

PROCESSING CONDITIONS OF EVALUATED FILM

VALUES, ENGLISH UNITS

VALUES, INTERNATIONAL UNITS

Die Diameter

6.0 in

152 mm

Die Gap

100 mils

2.5 mm

Melt Temperature

450 ° F

232 ° C

Blow-up Ratio, BUR

2.5 ---

2.5 ---

Output

100.0 Lb/h

45.4 kg/h

Specific Output

5.31 Lb/h/in

0.09 kg/h/cm

Take-off Speed

800.0 ft/min

243.9 m/min

The data presented here is true and accurate to the best of our knowledge. Likewise, the values are nominal and should not be taken as minimum or maximum specifications. No warranty, express or implied, is made regarding resin performance. The customer must validate these properties according to his own evaluations on his machine and in his laboratory.

REGULATORY COMPLIANCE

This resin complies with the following FDA regulation: 21 CFR 177.1520: Olefinic Polymers. This regulation describes polyolefin resins that can be used safely for food packaging and preservation at low temperatures and at ambient temperatures. This resin is not designed for use in medical applications and should not be used in such applications.